

A New Species of *Perilla* (Labiatae) from Japan

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Perilla setoyensis G. Honda, a new species found from the area surrounding the Seto Inland Sea, is described. This species is distinct in the white collora and white to brown stamens from other wild taxa of Japan.

In 1990 we found an unknown plant of *Perilla* at the foot of Mt. Ugatake in the suburbs of Matsuyama, Shikoku. Our field studies and examination of herbarium specimens revealed that it is distinct from the known *Perilla* species. We, therefore, recognized it as a new species and named *Perilla setoyensis* G. Honda. This species is found only on the mountains surrounding the Seto Inland Sea. Specimens collected through field studies are maintained at the Experimental Station for Medicinal Plant Research, Faculty of Sciences, Kyoto University.

There are three wild species of *Perilla* in Japan, including *P. setoyensis*, and we found that all of them are diploid ($2n = 20$), while cultivated species, *P. frutescens*, is tetraploid ($2n = 40$) (unpublished data). Among the diploid species, *P. setoyensis* is readily recognized in the white collora and white to brown stamens. In the shape of leaves, *P. setoyensis* is similar to *P. citriodora* but differs in the shape of young inflorescence and the nature of bracts; the unopened young inflorescence is long and slender and the bracts are persistent to flower in *P. setoyensis* while the young inflorescence is short and thick and

the bracts are deciduous when flower in *P. citriodora*. In the shape of inflorescence and the stamens long exerted from collora, *P. setoyensis* is similar to *P. hirtella* but differs in the hairs of leaves and serration of leaves; *P. hirtella* has long hairs (1–2 mm long) on the upper surface and distinct teeth to the base of the leaves while *P. setoyensis* has only short hairs (0.2–0.3 mm long) on the surface of the leaves and indistinct teeth in the lower margins of the leaves.

Perilla setoyensis G. Honda (Figs. 1–2).

Typus Japan: Collected from Taishakukyo, Hiroshima Pref., and cultivated in the Experimental Station for Medicinal Plant Research, Faculty of Sciences, Kyoto University, Sept. 26, 1990, G. Honda 2324 (TI holotypus).

Herba annua. Caulis erectus, 50–100 cm altus, quadrangulus pubescens, pilis brevibus recurvis, 0.2–0.5 mm longis. Folia petiolis viridibus, 2–4 cm longis, laminis ovatis vel late ovatis, 10–13 cm longis, 6–8 cm latis, viridibus, apice acuminatis, serratiris distinctis, sed prope basin obsoletis, utrinque pilis brevibus 0.2–0.3 mm longis obtectis. Inflorescentia

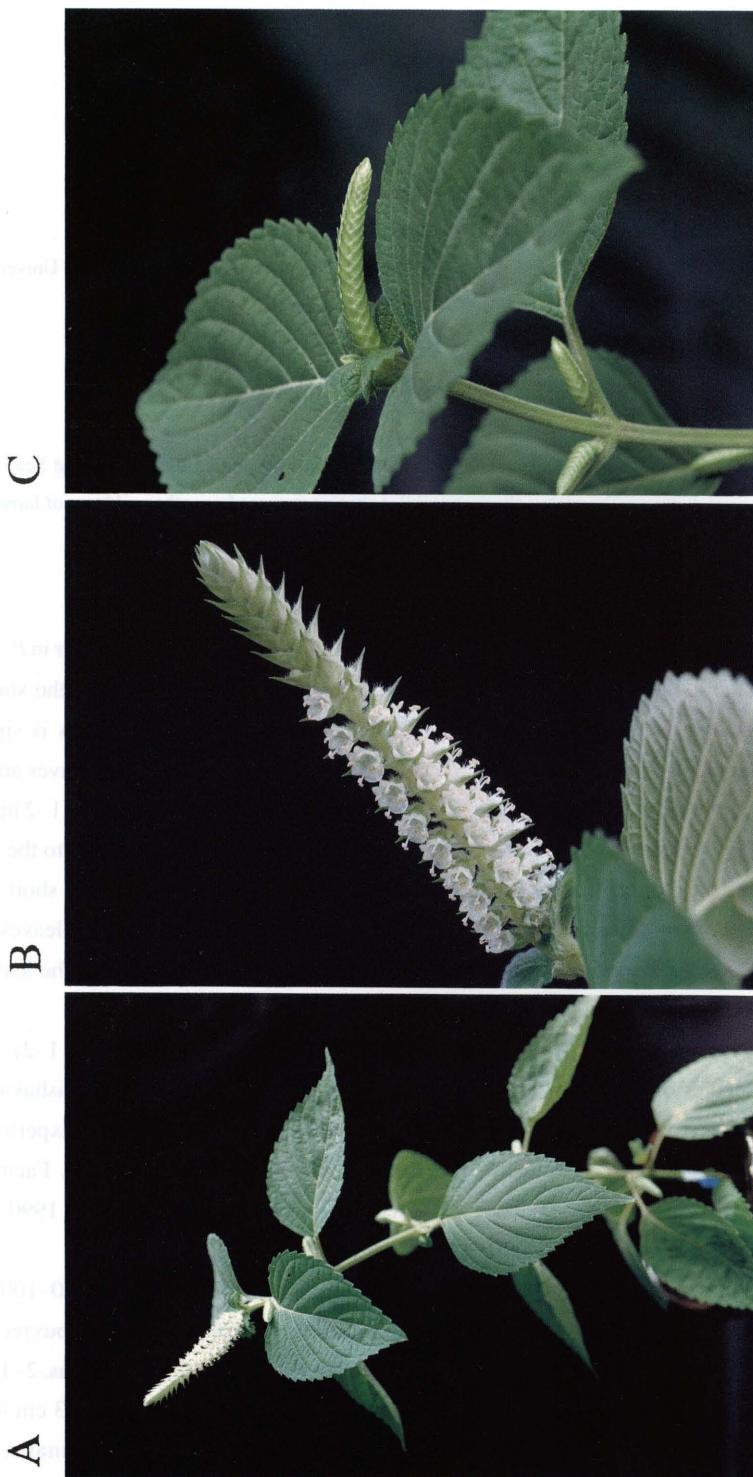


Fig. 1. *Perilla setoyensis*. A: Habit. B: Close up of the inflorescence. C: Young inflorescence before flower.



Fig. 2. Holotype of *Perilla setoyensis* (G. Honda 2324, TI).

terminalis, 80–100-florifera, in juvenali aculato-columellata, bractis multis strictis imbricatis tecta. Bracteae virides, orbiculato-ovatae vel depresso orbiculatae, apice attenuato-acuminatae, 6–7 mm

longae, 4.5–5 mm latae, persistentes, margine dense villosae, pillis 0.5–1 mm longis. Calyx bilabiatus, in anthesi 5–7 mm longus, 2–3 mm latus, villosus, pilis 1–1.5 mm longis, cum pilis brevibus ca. 0.1 mm



Fig. 3. Distribution of *Perilla setoyensis*. Closed circles show the locality of the populations examined in this study. Open circles are based on herbarium specimens previously collected.

longis immixtus. Corolla bilabiata, alba, 4–5 mm longa. Stamina exserta, antheris primo albis dein fuscatis. Mericarpia compresso-sphaerica, 1–1.2 mm in diam., fuscata; testa reticulata, 0.5–0.6 g per 1000 mericarpia.

Chromosome number. $2n = 20$ (unpubl.)

Distribution (Fig. 3). Kyoto Pref.: Arashiyama, Yamashiro, Oct. 27, 1962, G. Murata 17624 (KYO); Hozu, Kameoka, Oct. 19, 1992, S. Tsugaru & G. Murata 17257 (KYO); Mt. Ponpon-yama, Otokuni, Yamashiro, Oct. 1, 1933, H. Yamamoto (TI, TNS). Okayama Pref.: Iibe, Takahari, Jul. 1993, G. Honda 2590–2592; Wadaminami, Tatebe, Ohtsu, Jul. 1993, G. Honda 2593–2597. Hiroshima Pref.: Taisyakukyo, Sept. 1990, G. Honda 2323–2336, 2567–2576; Takao, Yamano, Sept. 1990, G. Honda 2580–2581; Ryuzunotaki, Yamano, Sept. 1990, G. Honda 2577–

2579; Fujio, Ajina, Bingo, Sept. 3, 1939, Y. Kato s.n. (KYO). Ehime Pref.: Ugatake, Matsuyama, Aug. 1989, G. Honda 2550–2566; Furuta, Koryuji, Tambara, Syuso, Jul. 1993, G. Honda 2587–2589; Sekiyayama, Syuso, Sept. 13, 1931, I. Yogo s.n. (KYO); Kawanose; Sakuragi, Syuso, 1933, I. Yogo 65841 (MAK). Tokushima Pref.: Unotao-tunnel, Gosyo, Tosei, Itano, Jul. 1993, G. Honda 2584–2586. Kochi Pref.: Kamogamine, Monobe, Kobi, Aug. 1993, G. Honda 2598–2600.

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本多義昭, 弓場亜希子, 伊藤美千穂, 田端 守:

日本産シソ属（シソ科）の1新種セトエゴマ

瀬戸内海地域に分布するシソ属の新種を発見し, セトエゴマ *Perilla setoyensis* G. Honda と名付けて記載した。本種は既知の2倍体野生種（レモンエゴマとトラノオジソ）と比較すると花冠が白色であること, 莖が白色から褐色で紫色ではないことで区別できる。さらに, 葉形ではレモンエゴマに似るが, 開花前の花穂が細長いこと, 苞が果実期

まで宿存することで, 花序が太短く苞が果実期に脱落するレモンエゴマから区別できる。また, 花穂の形や雄蕊が花冠から突出する点ではトラノオジソに似るが, トラノオジソに特徴的な葉面の長毛がなく, 鋸歯が葉の基部では低くて明瞭でないことで区別できる。